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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/574,299

03/22/2007

Wilfried Blocken

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EXAMINER

WENDELL, MARK R

ART UNIT

PAPER NUMBER

3635

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/574,299	Applicant(s) BLOCKEN, WILFRIED	
	Examiner MARK R. WENDELL	Art Unit 3635	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 March 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>20060717, 20061030</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claims 5 and 6 recite the broad recitation "6-10 volume percent of cement" for claim 5, and "ranges between 4 and 15 cm" for claim 6, and the claims also recite "more specifically 92 volume percent..." for claim 5 and "more specifically between 8 and 12 cm" for claim 6 which is the narrower statement of the range/limitation.

Regarding claims 1 and 4, the phrase "such as" renders the claims indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Claim 4 recites the limitation "the concrete from which the outer layer is made" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claims 1-2 and 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The word "preferably" does not clearly set forth the metes and bounds of the patent protection desired.

Claims 15 and 17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The phrases "fresh" and "normal" are extremely broad modifiers. More information regarding the objects that these terms describe is needed to decipher to what degree these terms limit the claimed subject matter.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, 7, 9-10, 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Blocken (US 5904763). Regarding claim 1, Blocken illustrates in Figures 1 and 2 and describes in the specification (claims 1-5 and 14, Column 1, lines 6-58 and column 2, lines 34-53) a building material comprising:

- An outside face;
- An inside face;
- A three-layered structure having an outer layer (30, 34), inner layer (20), and middle layer (24) made from insulating mortar with high thermal performance that has at least 70 volume percent of recycled, granular polyurethane and cement.

The examiner notes that the outer layer (30) in Figure 1 does not directly touch the mortar layer (24), rather insulation (28) does; however column 2, lines 48-49 state that the insulation may be removed.

Regarding claim 2, Blocken illustrates in Figures 1 or 2 the width of the middle layer (24) greater than the width of the outer layer (34, 30) and greater than the width of the inner layer (20).

Regarding claim 3, Blocken illustrates in Figures 1 or 2 the width of the outer layer (34, 30) being thinner than the width of the inner layer (20).

Regarding claim 4, Blocken illustrates in Figure 1, the outer layer (30) being made from concrete.

Regarding claim 5, Blocken teaches in Claims 4 and 6 of the prior the middle layer comprising 90-94 volume percent of recycled polyurethane that is ground into a powder and granule mixture with particle size of less than 8mm and 6-10 volume percent of cement.

Regarding claim 7, Blocken illustrates in Figures 1 and 2 the middle layer (24 having a pore structure (26).

Regarding claims 9-10, Blocken teaches in Columns 2 and 3 that all surfaces within the structure are level.

Regarding claim 13, Blocken does not teach or illustrate gaps in the inner or outer layers.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3 and 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blocken (US 5904763). It is described above what is disclosed by Blocken; however the reference never distinctly discloses the exact thickness or length of individual layers. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the outer layer have a thickness between 4 and 15 cm and have an overall length of 0.4 to 2.5 m, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art (*In re Aller*, 105 USPQ 233).

Regarding claim 12, Blocken illustrates a strip-shaped insulation, which is well known to be a rubber-like material since it dampens noise from foot traffic, (28) between layers of the block, however not between two blocks. It would have been obvious to one having ordinary skill in the art at the time of invention to include the insulating strip between two blocks to decrease the amount of transferred noise.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Blocken (US 5904763) in view of Maguire et al. (US 6082933). It is described above what is disclosed by Blocken; however the reference fails to teach a projection and corresponding recess. Maguire illustrates in Figure 3 a concrete block with corresponding projections and recesses. It would have been obvious to one having ordinary skill in the art at the time of invention to make the block apparatus of Blocken in

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the shape of the block of Maguire in order to be able to stack multiple blocks together to build a larger structure.

Claims 14-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blocken (US 5904763) in view of Mandish (US 5724783). It is described above what is disclosed by Blocken; however the reference fails to include the lamination of the additional outer layer and the inner layer, and (ii) the mean layer thickness is reduced by at least 0.5% during the process. The lamination of additional layers onto a mortar comprising cement and reprocessed polymer resin and also the waiting time during which the mortar-containing layer cures and becomes thinner are mentioned in Mandish which discloses a multilayer wall building element (claims 1, 8; column 1, lines 33-38; column 2, lines 26-51; column 3, line 57 - column 4, line 37). A person skilled in the art would therefore consider the inclusion of these features as a routine measure for solving the problem of interest.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARK R. WENDELL whose telephone number is (571)270-3245. The examiner can normally be reached on Mon-Fri, 7:30AM-5PM, Alt. Fri off, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Chilcot can be reached on (571) 272-6777. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Richard E. Chilcot/
Supervisory Patent Examiner, Art
Unit 3635

/M. R. W./
Examiner, Art Unit 3635
March 10, 2008